

**WE CLAIM:**

1. A display system, comprising:
  - a liquid crystal display (LCD) controller processing general format data and generating segment control signals and common control signals;
  - an organic light emitting diode (OLED) segment driver;
  - an organic light emitting diode (OLED) common driver;
  - a segment interface adopter coupling the OLED segment driver and the LCD controller and processing the segment control signals for the OLED segment driver;
  - and
  - a common interface adopter coupling the OLED common driver and the LCD controller and processing the common control signals for the OLED common driver.
2. The system of claim 1 further comprising a drive strength selector controlling drive strength in the OLED segment driver.
3. The system of claim 1 further comprising a drive strength selector controlling drive strength in the OLED common driver.
4. The system of claim 1 wherein the LCD controller is a thin film transistor (TFT) LCD controller.
5. The system of claim 1 wherein the LCD controller is a super twisted nematic (STN) LCD controller.

6. The system of claim 1, the segment interface adopter directly shifting data from the LCD controller to the OLED segment driver.

7. The system of claim 1, the segment interface adopter further comprising a logic controller, gated clock generator, data latch and pulse width modulation (PWM) signal generator.

8. The system of claim 1, the common interface adopter further comprising a logic controller, row enable signal generator and row drivers.

9. An organic light emitting diode (OLED) driver apparatus for a liquid crystal display (LCD) controller processing general format data for display, the OLED driver apparatus comprising:

an OLED segment driver;

an OLED common driver;

a segment interface adopter coupling the OLED segment driver and the LCD controller and processing segment control signals from the LCD controller for the OLED segment driver; and

a common interface adopter coupling the OLED common driver and the LCD controller and processing the common control signals from the LCD controller for the OLED common driver.

10. The apparatus of claim 9 further comprising a drive strength selector controlling drive strength in the OLED segment driver.
11. The apparatus of claim 9 further comprising a drive strength selector controlling drive strength in the OLED common driver.
12. The apparatus of claim 9 wherein the LCD controller is a thin film transistor (TFT) LCD controller.
13. The apparatus of claim 9 wherein the LCD controller is a super twisted nematic (STN) LCD controller.
14. The apparatus of claim 9, the segment interface adopter directly shifting data from the LCD controller to the OLED segment driver.
15. The apparatus of claim 9, the segment interface adopter further comprising a logic controller, gated clock generator, data latch and pulse width modulation (PWM) signal generator.
16. The apparatus of claim 9, the common interface adopter further comprising a logic controller, row enable signal generator and row drivers.

17. A method for driving an organic light emitting diode (OLED) for a liquid crystal display (LCD) controller, comprising:

processing general format data for display in the LCD controller;

providing segment control signals and common control signals from the LCD controller;

processing the segment control signals in a segment interface adopter;

processing the common control signals in a common interface adopter;

driving the segment control signals in an OLED segment driver; and

driving the common control signals in an OLED common driver.

18. The method of claim 17 further comprising controlling drive strength in the OLED segment driver.

19. The method of claim 17 further comprising controlling drive strength in the OLED common driver.

20. The method of claim 17 further comprising directly shifting data from the LCD controller to the OLED segment driver.